AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. **(currently amended)** A method for manufacturing a gallium nitride (GaN)-based single crystalline substrate comprising the steps of:

(a) forming a ~~AlxGa1-xN (0≤x<1)~~ GaN-based single crystalline bulk on an upper surface of a growth substrate;

(b) forming grooves through the growth substrate so that the growth substrate is patterned and divided into several units by the grooves, each of said grooves having a designated width; and

(c) separating the GaN-based single crystalline bulk from the growth substrate by irradiating a laser beam on a lower surface of the growth substrate.

2. **(original)** The method for manufacturing a GaN-based single crystalline substrate as set forth in claim 1,

wherein the GaN-based single crystalline bulk is grown on the upper surface of the growth substrate using vapor deposition such as MOCVD (Metal Organic Chemical Vapor Deposition) or HVPE (Hydride Vapor Phase Epitaxy).

3. **(original)** The method for manufacturing a GaN-based single crystalline substrate as set forth in claim 1,

wherein the growth substrate is a sapphire substrate or a SiC substrate.

4. **(original)** The method for manufacturing a GaN-based single crystalline substrate as set forth in claim 1, after the step (a), further comprising the step of (a') polishing the growth substrate so that the growth substrate is reduced to a designated thickness.

5. **(original)** The method for manufacturing a GaN-based single crystalline substrate as set forth in claim 1,

wherein the width of each of the grooves is at least approximately 10㎛.

6. **(original)** The method for manufacturing a GaN-based single crystalline substrate as set forth in claim 1,

wherein the step (b) is achieved using a high-powered laser.

7. **(currently amended)** The method for manufacturing a GaN-based single crystalline substrate as set forth in claim [[1]]6,

wherein the high-powered laser outputs a laser beam with a wavelength of less than approximately 350㎚.

8. **(original)** The method for manufacturing a GaN-based single crystalline substrate as forth in claim 1,

wherein the step (c) is achieved by scanning the lower surface of the growth substrate using the laser beam.

9. **(original)** The method for manufacturing a GaN-based single crystalline substrate as set forth in claim 1,

wherein the laser beam irradiated on the lower surface of the growth substrate for separating the GaN-based single crystalline bulk from the growth substrate has a wavelength of less than approximately 350㎚.

10. **(original)** The method for manufacturing a GaN-based single crystalline substrate as set forth in claim 1,

wherein the laser used for separating the GaN-based single crystalline bulk from the growth substrate is selected from the group consisting of ArF, KrF, XeCl, and Nd:YAG lasers.

11. **(original)** The method for manufacturing a GaN-based single crystalline substrate as set forth in claim 1,

wherein the step (c) includes the sub-steps of:

(c-1) irradiating the laser beam on the lower surface of the growth substrate; and

(c-2) heating the growth substrate and the GaN-based single crystalline bulk at a temperature of at least 40°C.

12. **(original)** The method for manufacturing a GaN-based single crystalline substrate as set forth in claim 1, after the step (c), further comprising the step of (d) lapping and polishing the surface of the GaN-based single crystalline bulk from which the growth substrate is separated.

13. **(new)** The method for manufacturing a GaN-based single crystalline substrate as set forth in claim 1, wherein the GaN-based single crystalline bulk is a AlxGal-xN ($0<x<1$) single crystalline bulk.

14. **(new)** The method for manufacturing a GaN-based single crystalline substrate as set forth in claim 1, wherein the GaN-based single crystalline bulk is a AlxGal-xN ($0\leq x<1$) single crystalline bulk.